4 inches, is about 2 inches wide, and on the interior surface is provided with about six highly elevated folds, which have other, smaller folds between them. Both begin and end on the entrances of the two pouches at the ends of the stomach. The right pouch, situated near the pylorus, is smaller, but of the same figure and construction as the corresponding one of the other or left side. Over this pouch on the right end a high transverse circular fold separates a small chamber from the central stomach; and this part, after the fold, which is separated into three different lobes by other folds, must be regarded as a separate stomach, or a propylorus, because from it begins the duodenum. There was only a short portion of this intestine; but I could observe soon after the beginning of it an expansion, like a lateral pouch, which is also known in *Phocæna*, and very well figured by Rapp in his interesting work on the 'Cetacea' (Tübingen, 1837–38), pl. 6. f. 3*f*. I find thus a general resemblance in the stomach of *Pontoporia* to that of *Phocæna*, if we regard only the fundamental type of both, and not the particular execution of this type in the different genera.

In the pouch on the right side of the stomach I found some teeth of a Cephalopodous animal, belonging to the family of *Loligo*, and also the lenses of the eyes of animals of the same group. This proves that *Pontoporia* is a marine animal, and that it goes only from curiosity or necessity in stormy times into the mouths of rivers. The individual which we have had for a long time in the Museum was taken near Maldonado, and is also a young animal; but we have skulls of full-grown size, 16″ long, which prove that the whole animal may be 4 feet long, the skull being somewhat more in length than the third part of the whole body. My young specimen is 30 inches long, and the skull measures 11 inches. Under these circumstances I cannot believe that the large Dolphin of 15 feet in length, seen by Freminville on the coast of Brazil, which Dr. Gray mentions in the 'Catalogue of Seals, &c.' p. 232, was of this species.

Note.—As I propose to give an extended description of the skeleton and the other parts, illustrated by well-executed figures, in one of the forthcoming numbers of the 'Añales del Museo publico de Buenos Aires,' I have not thought it necessary to enter here into any further details respecting their structure.

5. Notes upon some Interesting Chinese Shells, with a Description of Two or Three New Species of *Unionidæ*, collected at Shanghai by Jones Lamprey, M.D., 67th Regiment, C.M.Z.S. By W. Baird, M.D., and H. Adams, F.L.S.

(Plate XXVI.)

Amongst a variety of land- and freshwater shells brought from Shanghai by Dr. Lamprey, and lately added to our National Col-

lection, there are several species which deserve some special notice, besides two or three which appear to be undescribed.

1st. *Unio douglasiæ*. In 1833 Dr. Gray shortly described and accurately figured, in the twelfth volume of Griffith's edition of Cuvier's 'Animal Kingdom,' a species of *Unio* which he calls *Unio douglasiæ*. The type specimen of this shell has always been, and still remains, in the collection of shells in the British Museum. Dr. Lamprey has brought a considerable series of this *Unio*, which seems to be not uncommon in the neighbourhood of Shanghai. Perhaps from not knowing the shell as figured in Griffith, Mr. Lea some years afterwards described and figured a species from China, which he named *Unio murchisonianus*, but which, there is no doubt, is the same as the *U. douglasiæ* of Gray. Still later, in the seventh volume of his 'Observations on the genus *Unio*,' he describes and figures a species from Shanghai, which he calls *U. shanghaiensis*. A careful examination of the description and figures of the two last-named species, with the type specimen of that described and figured by Dr. Gray in Griffith's 'Animal Kingdom,' satisfies us that the three species are identical. The name *U. douglasiæ* must therefore stand, having the precedence over the others by some years.

2nd. *Anodonta tenuis*. Another species of the family *Unionidæ*, brought by Dr. Lamprey, appears to be the *U. tenuis* of Gray, figured also in Griffith's 'Animal Kingdom.' In the list of the figures of shells at the end of the twelfth volume of that work this shell appears twice, first under the name of *Anodon tenuis*, and secondly under that of *Unio tenuis*. An examination of the specimens brought by Dr. Lamprey shows that this species belongs more correctly to the genus *Anodonta* than to *Unio*, as no trace of teeth is to be seen in it. A reference to the figure will also demonstrate this; and this shell, therefore, though denominated in the plate *Unio tenuis*, must be now, as indicated in the letterpress, called *Anodonta tenuis*. From there being no lengthened diagnosis given with the figures, these two last-named species are but little known under their origiual names.

3rd. *Glauconomya primeana*? Two apparently distinct species of *Glauconomya* are in the collection of Dr. Lamprey. One of these appears to resemble somewhat the *G. chinensis* of Gray; and the other more nearly approaches to one lately described and figured in the third volume of the third series of the 'Journal Conchyliologique,' by MM. Crosse and Debeaux, under the name of *G. primeana*. Several specimens of these shells occur; and it is possible they may all be referred to this species, though they differ in some respects from the figure given in the above-mentioned work.

4th. *Anodonta gibba*. A very interesting series also occurs of the *Anodonta gibba* of Cantor and Benson, which shows how considerably this species varies according to age. When adult it is much more rounded, and appears shorter than the younger specimens.

5th. *Nanina ravida*. A very interesting series of a species of *Nanina* was also brought by Dr. Lamprey. Several specimens undoubtedly represent the *Nanina ravida* of Benson, have a tolerably

open umbilicus, and are of a large size; but along with these are a number of specimens which differ in size and have the umbilicus closed. In almost every respect the smaller of these shells resemble the *Nanina redfieldi* of Pfeiffer; but as there is one specimen with a closed umbilicus, nearly of the same size as the true *N. ravida*, and agreeing with it in every other point, it appears to be very difficult, with the exception of the closed umbilicus, to separate the two species from each other. There is also a small species of *Helix* in the collection, which appears to be an elevated variety of the *H. ciliosa* of Pfeiffer.

6th. Among the *Unionidæ* are several specimens of the rather rare *Unio nodosus* of Wood, and one valve, exactly similar to the *Barbala magnifica* of Lea from Japan. *Arconaia lanceolata* (*Triquetra lanceolata*, Lea) and one or two species of *Melania*, more especially *M. cancellata* of Cantor, likewise occur in the collection. A single specimen of *Meretrix* (*Cytherea*, Lam.) *zonaria* (a rare shell), and several others might be enumerated.

7th. Another very interesting shell was brought by Dr. Lamprey, a single specimen of a species of *Unio*, belonging to a form which, till very lately, had only been observed in North America. This may be the *Unio tientsinensis* of Crosse and Debeaux; but as it differs in some respects from the figure given by these authors, we are inclined to consider it distinct.

Unio (Lampsilis) subtortus, nob. (Pl. XXVI. figs. 1, 1 *a*.)

U. *testa oblique ovata, valde inæquilaterali, solida, ventricosa, concentrice rugoso-striata, ad marginem dorsalem oblique nodoso-plicata; valvis subtortis; umbonibus lateralibus, prominentibus, erosis, ad apices tuberculosis; margine dorsali convexo; margine ventrali ovato; latere antico declivi, convexo; latere postico elongato, oblique ovato, obscure angulato; epidermide olivaceo-fusca, sericea; dentibus cardinalibus crassis, duplicibus, subverticalibus, sulcatis, dente valvæ sinistræ multum majore; dentibus lateralibus elongatis, subarcuatis, transverse sulcatis, in valva sinistra duplicibus; margarita albida.*

Long. 55, alt. 50, lat. 28 mill.

Hab. Shanghai, North China (*Dr. Lamprey*).

The nodose plications on the dorsal edge are elevated, but worn. They appear almost to have been originally blunt spines. The shell is longer than the species figured by Crosse, and not so tumid.

Unio (Dysnomia) lampreyanus, nob. (Pl. XXVI. figs. 2, 2*a*.)

U. *testa subtriangulari, inæquilaterali, solida, compressa, concentrice late et valde plicata; margine dorsali arcuato; margine ventrali arcuato; latere antico circulari; latere postico oblique ovato; umbonibus prominentibus, erosis; epidermide nitida, luteo-olivacea, fusco-viridi radiata; dentibus cardinalibus crassis, verticalibus, duplicibus, sulcatis; dentibus lateralibus*

curvatis, elongatis, in valva sinistra duplicibus; margarita argentea, iridescente.

Long. 49, alt. 41, lat. 24 mill.

Hab. Shanghai, North China (*Lamprey and Harland*).

ANODONTA HARLANDI, nob. (Pl. XXVI. figs. 3, 3*a*.)

A. *testa transversa, elongato-ovata, inæquilaterali, tenuiuscula, inflata, concentrice striata; margine dorsali postice arcuato, antice excavato; margine ventrali convexo; latere antico rotundato; latere postico oblique subtruncato, declivitate umbonali obtuse angulato; umbonibus antemedianis, inconspicuis, sulcatis; epidermide fusco-olivacea; margarita cæruleu, callositate apicali livido tincta.*

Long. 70, alt. 45, lat. 33 mill.

Hab. Shanghai, North China (*Harland and Lamprey*).

Specimens of this interesting species from China were first sent over to the British Museum by the late Dr. Harland, to whose memory we have dedicated this shell.

DESCRIPTION OF PLATE XXVI.

Figs. 1, 1*a*. *Unio* (*Lampsilis*) *subtortus*, p. 491.
2, 2*a*. —— (*Dysnomia*) *lampreyanus*, p. 491.
3, 3*a*. *Anodonta harlandi*, p. 492.

6. Notes on the Arrangement of Sponges, with the Description of some New Genera. By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S., &c.

(Plates XXVII., XXVIII.)

Dr. Solander, nearly a century ago, well observed that some sponges are "composed wholly of interwoven reticulated fibres, while others are composed of little masses of straight fibres of different sizes, from the most minute spicula to strong elastic shining spines, like small needles of one-third of an inch long; besides these there is an intermediate sort between the reticulated and the finer fasciculated kinds, which seems to partake of both sorts."—*Zoophytes*, p. 182.

In the 'Annals of Philosophy,' n. s. vol. ix. p. 431, 1825, I published a short notice on the "Chemical Composition of Sponges," in which I pointed out from chemical analysis, I believe for the first time, that the spicules of several sponges consist almost entirely of pure silica.

This paper was very shortly followed by two papers by Dr. Edmund Grant, entitled, 1st, "On Calcareous Sponges," 2nd, "On Siliceous Sponges," published in the 'Edinburgh New Philosophical Journal,' i. pp. 166 & 341, for 1826.

Since the publication of my paper and his, Dr. Grant has pro-